Attachment Five
Fact Sheets In Support of New Listings, and Delistings to the Colorado River Basin Region 2008 303(d) List.

List on 303(d) list (TMDL required list)

Alamo River
- Chlordane (4500)
- Diazinon (8170)
- Endosulfan (8179)
- Enterococcus (8194)
- Escherichia coli (E. Coli) (8195)
- Mercury (4512)

Coachella Valley Storm Water Channel
- DDT (8276)
- Dieldrin (8277)
- PCBs (Polychlorinated biphenyls) (8278)

Imperial Valley Drains
- Chlordane (8596)

New River (Imperial County)
- Hexachlorobenzene/ HCB (8226)

Palo Verde Outfall Drain and Lagoon
- Toxaphene (8345)

Salton Sea
- Arsenic (8431)
- Chlorpyrifos (8432)
- DDT (8433)
- Diazinon (8434)
- Enterococcus (8436)

Wiest Lake
- DDT (8580)

Water Body Name:	**Alamo River**
Water Body ID:	**CAR723100001999020509302 3**
Water Body Type:	**River & Stream**

DECISION ID	**4500**

Pollutant:	**Chlordane**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. No water samples exceeded a water quality objective. When compared to the CTR 2.4 ug/l threshold for aquatic life, there were no exceedances out of 28 total water samples taken over all the sampling years.

There were 25 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 5.6 ug/kg threshold for consumption, there were 24 exceedances out of 35 fish tissue samples taken. When compared to the NAS 100 ug/kg threshold for aquatic life, there was 1 exceedance out of 35 fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 24 out of 35 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 4500

LOE ID:	2882
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Data were collected by the RWQCB on 4/15/2003 at 7 different stations on the Alamo River. All samples were non-detects with a detection limit of 0.025 ppb, so there were no exceedances. Samples were also collected by the RWQCB on 6/21/2001 at 7 different stations on the Alamo River. All samples were non-detects, with a detection limit of 1 ppb, so there were no exceedances (CRBRWQCB, 2004C).
Data Reference:	Placeholder reference 2006 303(d)
Water Quality Objective/Criterion:	USEPA: 2.4 ppb freshwater acute maximum and freshwater chronic maximum = 0.0043 ppb as a 4-day average.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-GRB.
Temporal Representation:	All samples were collected on 4/15/2003 and 6/21/2001.
Environmental Conditions:	
QAPP Information:	Used RWQCB QA/QC in sample collection. Lab analysis was done by E.S. Babcock & Sons laboratory and a Quality Assurance Manual was provided.
QAPP Information Reference(s):	

LOE ID:	5006
Pollutant:	.alpha.-Endosulfan(Endosulfan 1) | .beta.-Endosulfan (Endosulfan 2) | Aldrin | Chlordane | Dieldrin | Endrin | Heptachlor | Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Fourteen water quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at 2 locations along the Alamo River. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentrations (CMCs) for the protection of freshwater aquatic life uses were used for the following constituents: 3 ug/l Aldrin, 0.22 ug/l alpha-Endosulfan, 0.22 ug/l beta-Endosulfan, 2.4 ug/l Chlordane, 0.24 ug/l Dieldrin, 0.086 ug/l Endrin, 0.52 ug/l Heptachlor, and 0.52 ug/l Heptachlor epoxide (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, and near the outlet to the Salton Sea from Garst Road bridge.
Temporal Representation:	Fourteen water samples were collected. Water samples were collected and analyzed biannually, in May and October, from 5/2002 through 5/2005.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5377
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	35
Number of Exceedances:	24
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water	Thirty fish fillet samples and 5 whole fish samples were taken at 4

Quality:	locations in the river. The fish tissue samples were generally collected from 6/1978 through 11/2000. Of these total samples, 23 fish fillet samples and 1 whole fish samples collected at two locations exceeded the OEHHA Fish Contaminant Goal. At the Calipatria location the exceedances were found in; 11 Channel Catfish fillet composite samples collected on 3/12/1979, 5/08/1980, 5/23/1981, 4/22/1982, 6/13/1983, 5/23/1984, 9/17/1985, 9/30/1987, 11/01/1996, 11/20/1997, and 11/11/1998; 1 channel catfish single fish fillet on 10/27/1994; 8 Carp fillet composite samples collected on 5/23/1981, 4/22/1982, 6/13/1983, 5/23/1984, 9/17/1985, 11/18/1988, 8/03/1990, and 9/29/1993, and; 2 Carp single fish fillet samples on 10/27/1994, and 11/07/2000. At the International Boundary location the exceedances were found in; 1 carp fillet composite sample collected on 11/20/1998, and; 1 Mosquitofish whole fish composite sample collected on 9/02/1987. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 5.6 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, near Holtville, CA, near Brawley, CA, and near Caliptaria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty fish filet samples channel catfish, carp, largemouth bass, and spiny soft shelled turtle were collected. Thirteen channel catfish fillet composite samples were collected in the years 1978-1985, 1987,1993, and 1996-98. Two channel catfish single fish fillet samples were collected in the years 1989, and 1994. Eleven carp fillet composite samples were collected in the years 1981-85, (2)1988, 1990, (2)1993, and 2000. Two carp single fish fillet samples were collected in the years 1978, and 1994. One largemouth bass single fish fillet sample was collected in the year 1985. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Five whole fish composites of red swamp crayfish, redshiner, mosquito fish and tilapia were collected. Two red swamp crayfish whole fish composite samples were collected in the years 1979-1980. One redshiner whole fish composite sample was collected in the year 1985. One mosquitofish whole fish composite sample was collected in the year 1987. One tilapia whole fish composite sample was collected in the year 2000. The exceedances were found in samples collected from 3/12/1979 through 11/07/2000.
Environmental Conditions:	

QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5576
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty fish fillet samples and 5 whole fish samples were taken at 4 locations in the river. Fish tissue samples were generally collected from 6/1978 through 11/2000. Of these total samples, 1 whole fish sample collected at 1 location exceeded the NAS tissue guideline. At the International Boundary location an exceedance was found in 1 mosquitofish whole fish composite sample collected on 9/02/1987. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 100 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the following Alamo River locations:at the International Boundary, near Holtville, CA, near Brawley, CA, and near Caliptaria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty fish filet samples of channel catfish, carp, largemouth bass, and spiny soft shelled turtle were collected. Thirteen channel catfish fillet composite samples were collected in the years 1978-1985, 1987,1993, and 1996-98. Two channel catfish single fish fillet samples were collected in the years 1989, and 1994.

	Eleven carp fillet composite samples were collected in the years 1981-85, (2)1988, 1990, (2)1993, and 2000. Two carp single fish fillet samples were collected in the years 1978, and 1994. One largemouth bass single fish fillet sample was collected in the year 1985. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Five whole fish composites of red swamp crayfish, redshiner, mosquito fish and tilapia were collected. Two red swamp crayfish whole fish composite samples were collected in the years 1979-1980. One redshiner whole fish composite sample was collected in the year 1985. One mosquitofish whole fish composite sample was collected in the years 1987. One tilapia whole fish composite sample was collected in the year 2000. An exceedence was found in a sample collected 9/02/1987.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID **8170**

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1, and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. There were 75 water samples that exceeded water quality objectives. When compared to the DFG 0.16 ug/l threshold for aquatic life, there were 75 exceedances out of 201 total water samples taken over all the sampling years.

No fish tissue samples exceeded water quality objectives. When compared to the OEHHA 300 ug/kg threshold for consumption, there were no exceedances out of 35 total fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 75 out of 201 water samples exceeded the California Department of Fish and Game Hazardous Assessment Criteria used to

interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8170

LOE ID:	4803
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Ten water quality samples were collected every few weeks from 8/28/1996 through 3/25/1997 at one location on the Alamo River. Of these total samples, 4 exceeded the CDFG Criteria. The exceedences were found in samples collected from 10/01/1996, 10/21/1996, 10/31/1996, and 11/12/1996 (CDPR, 2007).
Data Reference:	Data for pesticides in water samples collected from waterbodies located in the Colorado River Basin-Region 7. Mar. 1993-Jun. 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from the Alamo River at Garst Road bridge.
Temporal Representation:	Ten water samples were collected. The samples were collected every few weeks from 8/28/1996 through 3/25/1997. The exceedences were found in samples collected from 10/01/1996 through 11/12/1996.
Environmental Conditions:	The samples were collected every few weeks from August through

QAPP Information:	November 1996 and from February through April 1997 to coincide with the pesticide application periods in the Imperial Valley (autumn and late winter/early spring) (Crepeau et al, 2002). Investigators used USGS QA/QC in sample collection and analysis. Lab analysis was done by the USGS California District Organic Chemistry Laboratory in Sacramento, California (Crepeau, 2002)
QAPP Information Reference(s):	?Dissolved Pesticides in the Alamo River and the Salton Sea, California, 1996-97.? United States Geological Survey. Sacramento, CA. Open file report No. 02-232. http://water.usgs.gov/pubs/of/ofr02232/

LOE ID:	4802
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	84
Number of Exceedances:	34
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Eighty-four water quality samples were generally collected and analyzed once or twice a month from 3/15/1993 through 2/14/1994 at nine locations along the Alamo River. Of these total samples, 34 exceeded the CDFG Criteria. The exceedences were found in samples collected on 3/15/1993, 6/21/1993, 9/27/1993, 10/04/1993, 10/18/1993, 11/01/1993, 11/29/1993, 12/13/1993, 1/24/1994, and 2/14/1994 (CDPR, 2007).
Data Reference:	Data for pesticides in water samples collected from waterbodies located in the Colorado River Basin-Region 7. Mar. 1993-Jun. 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at the following Alamo River sampling stations: at Outlet to the Salton Sea, Albright Road (Nectarine Drain Area), Shank Road (Magnolia Drain Area), downstream of Rose Drain, downstream of Holtville Main Drain, at the Harris Street Bridge, Worthington Road, Holtville WTP, Holtville, downstream of Verde Drain, and at the All American Canal intersection.
Temporal Representation:	Eighty-four water samples were collected. The samples were generally collected and analyzed once or twice a month from 3/15/1993 through 2/14/1994. The exceedences were found in samples collected from 3/15/1993 through 2/14/1994.

Environmental Conditions:	
QAPP Information:	Investigators used UCD ATL methods for sample collection, and USEPA methods for analysis. Lab analysis was done by the Dept. of Pesticide, Eureka Laboratories, and Agriculture and Priority Pollutants Laboratories (APPL). QA/QC is described in DiGiorgio, 1994.
QAPP Information Reference(s):	"Colorado River Basin Toxicity Report, Draft Final, March 1993 through February 1994? prepared for V. de Vlaming and G. Starrett, SWRCB; prepared by, UC Davis Dept of Medicine and Epidemiology. Sacramento, CA. Interagency Agreement No. 0-149-250-0.

LOE ID:	4804
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Fifteen water quality samples were collected from three field events on 10/26/2004, 3/23/2005, and 6/07/2005 at five locations along the Alamo River. Of these total samples, 3 exceeded the CDFG Criteria. All three exceedences were found in samples collected on 10/26/04 (CDPR, 2007).
Data Reference:	Data for pesticides in water samples collected from waterbodies located in the Colorado River Basin-Region 7. Mar. 1993-Jun. 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at the following Alamo River sampling stations: Garst Road, Holtville Main Drain at Highway 115, Malva Drain near Park, Vail Drain near Young, Verde Drain and Bonds Corner Road.
Temporal Representation:	Fifteen water samples were collected. The samples were collected and analyzed from three field events on 10/26/2004, 3/23/2005, and 6/07/2005. All three exceedences were found in samples collected on 10/26/04.
Environmental Conditions:	Sampling was timed such that two of the sampling events took place during or immediately following periods of historically high pyrethroid use. Another sampling event took place during a period of relatively

	low historical pyrethroid use.
QAPP Information:	Sampling methods described in Starner, 2004. Analysis performed by California Department of Food and Agriculture?s Center for Analytical Chemistry using quality control measures in accordance with Standard Operating Procedure QAQC001.00 (Segawa, 1995).
QAPP Information Reference(s):	?Study 224. A Preliminary Assessment of Pyrethroid Contamination of Surface Waters and Bed Sediments in High Pyrethroid-Use Regions of California?. California Department of Pesticide Regulation Environmental Monitoring Branch. Sacramento, CA. QAQC001.00 Standard Operating Procedures. Chemistry Laboratory Quality Control. California Department of Pesticide Regulation Environmental Hazards Assessment Branch. Sacramento, CA.

LOE ID:	4867
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty water quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at 7 locations along the Alamo River. Of these total samples , 2 exceeded the CDFG Criteria. The exceedences were found in samples collected on 10/02/2002, and 10/05/2004 from the outlet to the Salton Sea location (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l for the protection of aquatic life uses (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, at Harris Road near Imperial, CA, Drop 6A, Drop 6, at Sinclair Road near Calipatria, CA,and near the outlet to the Salton Sea on Garst Road bridge.
Temporal Representation:	Twenty water samples were collected. Water samples were

	generally collected and analyzed biannually, usually in May and October, from 5/2002 through 5/2005 at the International Boundary, and Outlet to the Salton Sea. Two additional samples were collected in 4/2003 from these two locations. The rest of the locations were sampled once in 4/2003.The exceedences were found in samples collected from 10/02/2002 through 10/05/2004.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5185
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Twelve water quality samples were taken at 4 locations along the river, generally collected from 9/12/2006 through 4/17/2007. Of these total samples , 4 exceeded the CDFG Hazardous Assessment Criteria. The exceedences were found in samples collected on 10/14/2006, 10/16/2006, 10/17/2006, and 11/13/2006 from three locations, at the Outlet to the Salton Sea near Niland, CA, near Calipatria, CA, and at Harris Road near Imperial, CA (Orlando et al, 2008).
Data Reference:	"Pesticides in Water and Suspended Sediment of the Alamo and New Rivers, Imperial Valley/Salton Sea Basin, California, 2006-07". U.S. Geological Survey (USGS) Final Report prepared in cooperation with the California State Water Resources Control Board (SWRCB), delivered to the CRBRWQCB. Palm Desert, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at the following Alamo River locations: at the Outlet to the Salton Sea near Niland, CA, near Calipatria, CA, at

	Harris Road near Imperial, CA, and at the International Boundary with Mexico.
Temporal Representation:	Twelve water samples were collected. Samples were collected from the outlet to the Salton Sea monthly from 9/06 through 11/07 and 2/07 through 4/07. The other sites were sampled only twice, once in 10/2006 and another time in 3/2007. The exceedences were found in samples collected from 10/14/2006 through 11/13/2006.
Environmental Conditions:	
QAPP Information:	Investigators used USGS methods for sample collection and analysis. Lab analysis was done by the USGS Laboratories in Sacramento, CA. All methods were approved by State Board QA officer (USGS, 2007b).
QAPP Information Reference(s):	Quality Assurance Project Plan, Imperial Valley Pesticides TMDL Assessment Studies. Water Science Center. Sacramento, CA.

LOE ID:	5205
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	28
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Sixty-nine water samples were taken at 2 locations on the river. Nine water sample results could not be used in the assessment because either the sample results were non-detect and the detection limit was above the criteria concentration or the sample results were zero and the detection limit could not be determined. The 60 acceptable water quality samples were generally collected from 1/1971 through 4/1992. Of these total samples, 28 exceeded the CDFG Hazardous Assessment Criteria (USGS, 2007). The exceedences were found in samples collected from 1/18/1971, 10/07/1975, 11/19/1975, 1/29/1976, 2/18/1976, 3/17/1976, 6/02/1976, 9/22/1976, 3/22/1977, 4/19/1977, 9/13/1977, 10/20/1977, 11/08/1977, 1/25/1978/ 3/22/.1978/ 4/26/1978/ and 9/27/1978 from the two locations. (USGS, 2007).
Data Reference:	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l for the protection of aquatic life uses (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit,

	Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at the following Alamo River locations: USGS Station No. 10254670 located at Drop 3 near Calipatria, Ca, and USGS Station No. 10254730 near Niland, Ca.
Temporal Representation:	Sixty-nine samples were collected. Samples were generally collected from 1/1971 through 4/1992. Twenty-six samples were collected from 1971 to 1979, 41 from 1980 to 1989, and 1 in 1992. The exceedences were found in samples collected from 1/18/1971 through 9/27/1978.
Environmental Conditions:	
QAPP Information:	Assume samplers used standard USGS methods for sample collection (Wilde, variously dated). Assume analysts used standard analytical methods and quality assurance as described in (USGS, 2007).
QAPP Information Reference(s):	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005. Field measurements: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6. In United States Geological Survey (USGS). Variously dated. National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chaps. A1-A9, available online at http://pubs.water.usgs.gov/twri9A.

LOE ID:	5469
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty fish fillet samples and 5 whole fish samples were taken at 4 locations in the river. Fish samples were generally collected from 6/1978 through 11/2000. Of these total samples, none exceeded the OEHHA Screening Value (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA)

	Screening Value of 300 ug/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, near Holtville, CA, near Brawley, CA, and near Calipatria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty fish filet samples of channel catfish, carp, largemouth bass, and spiny soft shelled turtle were collected. Thirteen channel catfish fillet composite samples were collected in the years 1978-1985, 1987,1993, and 1996-98. Two channel catfish single fish fillet samples were collected in the years 1989, and 1994. Eleven carp fillet composite samples were collected in the years 1981-85, (2)1988, 1990, (2)1993, and 2000. Two carp single fish fillet samples were collected in the years 1978, and 1994. One largemouth bass single fish fillet sample was collected in the year 1985. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Five whole fish composites of red swamp crayfish, redshiner, mosquito fish and tilapia were collected. Two red swamp crayfish whole fish composite samples were collected in the years 1979-1980. One redshiner whole fish composite sample was collected in the year 1985. One mosquitofish whole fish composite sample was collected in the year 1987. One tilapia whole fish composite sample was collected in the year 2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID	**8179**

Pollutant:	**Endosulfan**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence: This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 4 fish tissue samples that exceeded the water quality objectives. When compared to the NAS 100 ug/kg threshold for aquatic life, there were 4 exceedances out of 35 total fish tissue samples

taken over all the sampling years. When compared to the OEHHA 20,000 ug/kg threshold for consumption, there were no exceedances out of 35 fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 4 out of 35 fish tissue samples exceeded the National Academy of Science fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8179

LOE ID:	5470
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty fish fillet samples and 5 whole fish samples were taken at 4 locations in the river. Fish samples were generally collected from 6/1978 through 11/2000. Of these total samples, none exceeded the OEHHA Screening Value (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006). Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 20,000 ug/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, near Holtville, CA, near Brawley, CA, and near Calipatria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty fish filet samples of channel catfish, carp, largemouth bass, and spiny soft shelled turtle were collected. Thirteen channel catfish fillet composite samples were collected in the years 1978-1985, 1987,1993, and 1996-98. Two channel catfish single fish fillet samples were collected in the years 1989, and 1994. Eleven carp fillet composite samples were collected in the years 1981-85, (2)1988, 1990, (2)1993, and 2000. Two carp single fish fillet samples were collected in the years 1978, and 1994. One largemouth bass single fish fillet sample was collected in the year 1985. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Five whole fish composites of red swamp crayfish, redshiner, mosquito fish and tilapia were collected. Two red swamp crayfish whole fish composite samples were collected in the years 1979-1980. One redshiner whole fish composite sample was collected in the year 1985. One mosquitofish whole fish composite sample was collected in the year 1987. One tilapia whole fish composite sample was collected in the year 2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5595
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	Fish tissue analysis

Data Used to Asses Water Quality:	Thirty fish fillet samples and 5 whole fish samples were taken at 4 locations in the river. The fish tissue samples were generally collected from 6/1978 through 11/2000. Of these total samples, 4 fish fillet samples from two locations exceeded the NAS tissue guideline. At the Calipatria location the exceedances were found in; 1 channel catfish fillet composite sample collected on 9/30/1987, and; 1 carp fillet composite sample collected on 11/18/1988. At the International Boundary location, exceedances were found in; 1 carp fillet composite sample collected on 11/20/1998, and; 1 largemouth bass fillet composite sample collected on 11/15/1985 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 100 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, near Holtville, CA, near Brawley, CA, and near Caliptaria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty fish filet samples of channel catfish, carp, largemouth bass, and spiny soft shelled turtle were collected. Thirteen channel catfish fillet composite samples were collected in the years 1978-1985, 1987,1993, and 1996-98. Two channel catfish single fish fillet samples were collected in the years 1989, and 1994. Eleven carp fillet composite samples were collected in the years 1981-85, (2)1988, 1990, (2)1993, and 2000. Two carp single fish fillet samples were collected in the years 1978, and 1994. One largemouth bass single fish fillet sample was collected in the year 1985. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Five whole fish composites of red swamp crayfish, redshiner, mosquito fish and tilapia were collected. Two red swamp crayfish whole fish composite samples were collected in the years 1979-1980. One redshiner whole fish composite sample was collected in the year 1985. One mosquitofish whole fish composite sample was collected in the year 1987. One tilapia whole fish composite sample was collected in the year 2000. The exceedances were found in samples collected from 11/15/1985 through 11/20/1998.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ.

State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID	8194

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 23 water samples that exceeded water quality objectives. When compared to the Basin Plan 100 MPN/100ml Enterococcus threshold for RECI beneficial use, there were 12 exceedances out of 13 total water samples taken over all the sampling years. When compared to the Basin Plan 500 MPN/100ml Enterococcus threshold for RECII beneficial use, there were 11 exceedances out of 13 total water samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 12 out of 13 water samples exceeded the Basin Plan water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8194

LOE ID: 4897

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirteen water quality samples were generally collected and analyzed biannually from 5/2002 through 4/2003 at 7 locations along the Alamo River. Of these total samples , 12 exceeded the Basin Plan Objective. The exceedences were found in samples collected on 5/06/2002, 5/08/2002, 10/01/2002, 10/02/2002, and 4/09/2003 from all seven locations (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for water contact recreation (REC I) the maximum allowable Enterococcus density is 100 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea on Garst Road bridge.
Temporal Representation:	Thirteen water samples were collected. Water samples were generally collected and analyzed in May and October 2002, from all locations. Samples were not collected from each location every sampling round Two additional samples were collected in April 2003 from the International Boundary and outlet to the Salton sea locations. The exceedences were found in samples collected from 5/08/2002 through 4/09/2003.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4908
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	11
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirteen water quality samples were generally collected and analyzed biannually from 5/2002 through 4/2003, at 7 locations in the Alamo River. Of these total samples, 11 exceeded the Basin Plan Objective. The exceedences were found in samples collected on 5/06/2002, 5/07/2002, 5/08/2002, 9/30/2002, 10/01/2002, 10/02/2002, and 4/09/2003 from all seven locations (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for noncontact water recreation (REC II) the maximum allowable Enterococcus density is 500 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea on Garst Road bridge.
Temporal Representation:	Thirteen water samples were collected. Water samples were generally collected and analyzed in May and October 2002, and April 2003 at the International Boundary and near the outlet to the Salton Sea. The rest of the locations were samples in May and October of 2002, although samples were not collected from each location every sampling round. The exceedences were found in samples collected from 5/06/2002 through 4/09/2003.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 8195

Pollutant:	**Escherichia coli (E. Coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence: This pollutant is considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 6 water samples that exceeded water quality objectives. When compared to the Basin Plan 400 MPN/100ml E. coli threshold for RECI beneficial use, there were 5 exceedances out of 13 total water samples taken over all the sampling years. When compared to the Basin Plan 2000 MPN/100ml E. coli threshold for RECII beneficial use, there was 1 exceedance out of 13 total samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 5 out of 13 water samples exceeded the Basin Plan water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8195

LOE ID:	4880
Pollutant:	Escherichia coli (E. Coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirteen water quality samples were generally collected and analyzed biannually from 5/2002 through 4/2003 at 7 locations along the Alamo River. Of these total samples , 5 exceeded the Basin Plan Objective. The exceedences were found in samples collected on 5/08/2002, 10/01/2002, and 4/09/2003 from four different locations

	(SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for water contact recreation (REC I) the maximum allowable E. coli density is 400 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea on Garst Road Bridge.
Temporal Representation:	Thirteen water samples were collected. Water samples were generally collected and analyzed biannually, usually in May and October, from 5/2002 through 4/2003 at the International Boundary and near the outlet to the Salton Sea locations. The rest of the locations were sampled in May and October 2002. Not all locations were sampled each sampling round. The exceedences were found in samples collected from 5/08/2002 through 4/09/2003.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4901
Pollutant:	Escherichia coli (E. Coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirteen water quality samples were generally collected and analyzed biannually from 5/2002 through 4/2003 at 7 locations along the Alamo River. Of these total samples, 1 exceeded the Basin Plan Objective. The exceedence were found in a sample collected on 10/01/2002 from Drop 10 (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for noncontact water recreation

	(REC II) the maximum allowable E. coli density is 2000 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea on Garst Road bridge.
Temporal Representation:	Thirteen water samples were collected. Water samples were generally collected and analyzed in May and October 2002, and April 2003. Samples were not collected from each location every sampling round. The exceedence was found in a sample collected on 10/01/2002.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 4512

Pollutant:	**Mercury**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. There were 18 water samples that exceeded water quality objectives. When compared to the CTR 0.051 ug/l threshold for human health, there were 17 exceedances out of 48 total water samples taken over all the sampling years. When compared to the CTR 1.4 ug/l threshold for aquatic life, there was 1 exceedance out of 71 total water samples taken.

No fish tissue samples exceeded the water quality objective. When compared to the OEHHA 0.3 ug/kg threshold for consumption, there were no exceedances out of 15 total fish tissue samples taken.

No sediment samples exceeded the water quality objective. When compared to the sediment quality guidelines 1.06 mg/kg threshold, there were no exceedances out of 13 sediment samples taken.

	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. At a minimum, 17 out of 48 water samples exceeded the California Toxics Rule criteria and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 4512

LOE ID:	5003
Pollutant:	Arsenic | Chromium (total) | Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-four water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 7 locations along the Alamo River. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentrations (CMCs) for the protection of freshwater aquatic life uses were used for the following constituents: 340 ug/l Arsenic, 1724 ug/l Chromium, and 1.4 ug/l Mercury (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea from Garst Road bridge.
Temporal Representation:	Twenty-four water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 at the International Boundary and outlet to the Salton Sea locations. The rest of the locations were sampled in May and October 2002 only.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	2899
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Data were collected by the RWQCB on 6/21/2001 at 7 different stations on the Alamo River. Of the 7 samples, all samples were non-detects and did not exceed either of the criteria (CRBRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
Water Quality Objective/Criterion:	USEPA: 50 ng/L for consumption of water and organisms or organisms only. The reporting limit is 1 ug/l, which is greater than the criterion.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-GRB.
Temporal Representation:	All samples were collected on 6/21/2001.
Environmental Conditions:	

QAPP Information:	Used RWQCB QA/QC in sample collection. Lab analysis was done by North Coast Labs.
QAPP Information Reference(s):	

LOE ID:	5008
Pollutant:	Mercury | Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-four water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 7 locations along the Alamo River. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents: 0.051 ug/l Mercury, and 4600 ug/l Nickel (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, Drop 10 near Holtville, CA, Drop 8, Drop 6A, Drop 6, Drop 3, and near the outlet to the Salton Sea from Garst Road bridge.
Temporal Representation:	Twenty-four water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 at the International Boundary and outlet to the Salton Sea locations. The rest of the locations were sampled in May and October 2002 only.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5106

Pollutant:	Arsenic | Cadmium | Chromium (total) | Copper | Lead | Mercury | Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirteen sediment quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 2 locations in the along the Alamo River. Of these total samples, none exceeded the PEC (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Consensus Based Sediment Quality Guideline Probable Effects Concentrations (PECs) for the protection of freshwater organisms to toxic effects were used for the following constituents: 33 mg/kg Arsenic, 4.98 mg/kg Cadmium, 111 mg/kg Chromium, 149 mg/kg Copper, 128 mg/kg Lead, 1.06 mg/kg Mercury, and 48.6 mg/kg Nickel (Macdonald et al, 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Samples were collected from the following Alamo River locations: at the International Boundary, and near the outlet to the Salton Sea on Garst Road.
Temporal Representation:	Thirteen sediment samples were collected. Sediment samples were generally collected and analyzed biannually from 5/2002 through 5/2005, in May and October. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5191
Pollutant:	Mercury

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	1
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Forty-seven water quality samples were taken at 1 location along the river, generally collected from 7/1979 through 9/1991. Of these total samples , 1 exceeded the CTR Criteria. The exceedence was found in a sample collected on 10/23/1979 (USGS, 2007).
Data Reference:	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentration (CMC) of 1.4 ug/l for the protection of freshwater aquatic life uses (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the following Alamo River location: USGS Station No. 10254670 located at Drop 3 near Calipatria, Ca.
Temporal Representation:	Forty-seven samples were collected. Samples were generally collected from 7/1979 through 9/1991. Two samples were collected in 1979, 38 samples were collected from 1980-1989, 7 samples were collected from 1990-1999. The exceedence was from a sample collected on 10/23/1979.
Environmental Conditions:	
QAPP Information:	Assume samplers used standard USGS methods for sample collection (Wilde, variously dated). Assume analysts used standard analytical methods and quality assurance as described in (USGS, 2007).
QAPP Information Reference(s):	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005. Field measurements: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6. In United States Geological Survey (USGS). Variously dated. National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chaps. A1-A9, available online at http://pubs.water.usgs.gov/twri9A.

LOE ID:	5203
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Forty-seven water samples were taken at 1 location on the river. Thirty water sample results could not be used in the assessment because either the sample results were non-detect and the detection limit was above the criteria concentration or the sample results were zero and the detection limit could not be determined. The 17 acceptable water quality samples were generally collected from 10/1979 through 9/1991. Of these total samples, 17 exceeded the CTR Criteria. The exceedences were found in samples collected from 10/23/1979 through 9/24/1991 at Drop 3 Near Calipatria, CA (USGS, 2007).
Data Reference:	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) criteria of 0.051 ug/l for the protection of human health when consuming organisms from aquatic systems (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the following Alamo River locations: USGS Station No. 10254670 located at Drop 3 near Calipatria, Ca.
Temporal Representation:	Forty-seven samples were collected. Samples were generally collected from 7/1979 through 9/1991. Two samples were collected in 1979, 38 samples were collected from 1980-1989, and 7 samples were collected from 1990-1999. The exceedences were found in samples collected from 10/23/1979 through 9/24/1991.
Environmental Conditions:	
QAPP Information:	Assume samplers used standard USGS methods for sample collection (Wilde, variously dated). Assume analysts used standard analytical methods and quality assurance as described in (USGS, 2007).
QAPP Information Reference(s):	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005. Field measurements: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6. In United States Geological Survey (USGS). Variously dated. National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chaps. A1-A9, available online at http://pubs.water.usgs.gov/twri9A.

LOE ID:	5562
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Twenty-one fish fillet samples and 4 whole fish samples were taken at 4 locations in the river. Seven fish fillet and 3 whole fish sample results could not be used in this assessment because the samples were not analyzed for the analyte. The 14 fish fillet samples and 1 whole fish samples that were acceptable were generally collected from 5/1981 through 11/2000 at four locations. Of these total samples, none exceeded the OEHHA Screening Value (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the Alamo River at the International Boundary, near Holtville, CA, near Brawley, CA, and near Caliptaria, CA.
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Twenty one fish fillet samples of carp, channel catfish, spiny soft shelled turtle were collected. Seven carp fillet composite samples were collected in the years 1981-82, 1987-88, 1990, (2)1993. Two carp single fish fillet samples were collected in the years 1994, and 2000. Ten channel catfish fillet composite samples were collected in the years 1978-82, 1987, 1993, 1996-98. One channel catfish single fish fillet sample was collected in the year 1994. One spiny soft shelled turtle fillet composite sample was collected in the year 1992. Four whole fish composite samples of red swamp crayfish, tilapia, mosquitofish, and red shiner were collected.

	One red swamp crayfish whole fish composite sample was collected in the year 1980. One tilapia whole fish composite sample was collected in the year 2000. One mosquitofish whole fish composite sample was collected in the year 1987. One red shiner whole fish composite was collected in the year 1985.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Water Body Name:	**Coachella Valley Storm Water Channel**
Water Body ID:	**CAR7194700019990205111415**
Water Body Type:	**River & Stream**

DECISION ID	**8276**

Pollutant:	**DDT**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. No water samples exceed the water quality objective. When compared to the California Toxics Rule 1.1 ug/l threshold for aquatic life, there were no exceedances out of 7 total water samples taken over all the sampling years.

There were 13 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 21 ug/kg threshold for consumption, there were 11 exceedances out of 12 fish tissue samples taken over all the sampling years. When compared to the NAS 1000 ug/kg threshold for aquatic life, there were 2 exceedances out of 12 fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 11 out of 12 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8276

LOE ID:	5587
Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. The fish samples were generally collected from 5/1986 through 11/2000. Of these total samples, 2 fish fillet samples collected at 1 location exceeded the NAS tissue guideline. Exceedances were found in; 1 channel catfish fillet composite sample collected on 5/21/1986, and; 1 carp fillet composite sample collected on 5/20/1986 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 1000 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two

	tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995. Exceedances were found in samples collected from 5/20/1986 through 5/21/1986.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5433
Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. The fish samples were generally collected from 5/1986 through 11/2000. Of these total samples, 4 fish fillet samples and 7 whole fish samples collected at 1 location exceeded the OEHHA Fish Contaminant Goal. Exceedances were found in; 1 channel catfish fillet composite sample collected on 5/21/1986; 1 channel catfish single fish fillet sample collected on 10/20/1987; 1 carp fillet composite sample collected on 5/20/1986; 1 carp single fish fillet sample collected on 10/20/1987; 2 tilapia whole fish composite samples collected on 10/30/1996, and 12/08/1999; 1 redbelly tilapia whole fish composite sample collected on 10/24/1995; 1 sailfin molly whole fish composite sample collected on 10/24/1995, and; 3 red shiner whole fish composite samples collected on 9/16/1992, 10/24/1995, and 11/06/2000 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 21 ug/kg to protect human health when consuming fish (OEHHA, 2008).

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995. The exceedances were found in samples collected from 5/20/1986 through 11/06/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	4994
Pollutant:	.alpha.-Endosulfan(Endosulfan 1) | .beta.-Endosulfan (Endosulfan 2) | Aldrin | Chlordane | DDT | Dieldrin | Endrin | Heptachlor | Heptachlor epoxide | Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Seven water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 1 location in the Coachella Stormwater Channel. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentrations (CMCs) for the protection of freshwater aquatic life uses were used

Objective/Criterion Reference:	for the following constituents: 3 ug/l Aldrin, 0.22 ug/l alpha Endosulfan, 0.22 ug/l beta-Endosulfan, 2.4 ug/l Chlordane, 1.1 ug/l DDT, 0.24 ug/l Dieldrin, 0.086 ug/l Endrin, 0.52 ug/l Heptachlor, 0.52 ug/l Heptachlor epoxide, and 1.4 ug/l Mercury (USEPA, 2000). Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from near the outlet to the Salton Sea.
Temporal Representation:	Seven water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID **8277**

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. No water samples exceed the water quality objective. When compared to the CTR 0.24 ug/l threshold for aquatic life, there were no exceedances out of 7 total water samples taken over all the sampling years.

There were six fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 0.46 ug/kg threshold for consumption, there were 6 exceedances out of 6 fish tissue samples taken. When compared to the NAS 100 ug/kg threshold for aquatic life, there were no exceedances out of 12 fish tissue samples taken.

No sediment samples exceed the water quality objective. When compared to the sediment quality guideline 61.8 ug/g threshold, there were no exceedances out of 9 sediment samples taken over all the sampling years.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-

	pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. At a minimum, 6 out of 6 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 8277

LOE ID:	5598
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. The fish samples were generally collected from 5/1986 through 11/2000. Of these total samples, none exceeded the NAS tissue guideline (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 100 ug/kg for

	the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	

LOE ID:	5434
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. Three fish fillet samples and 3 whole fish sample results could not be used in this assessment because the sample results were non-detect and the detection limit was above the criteria concentration. The 2 fish fillet samples and 4 whole fish samples that were acceptable were generally collected from 5/1986 through 11/2000. Of these total samples, 2 fish fillet samples and 4 whole fish samples collected at 1 location exceeded the OEHHA Fish Contaminant Goal. Exceedances were found in; 1 channel catfish fillet composite sample collected on 5/21/1986; 1 carp single fish fillet sample collected on 10/20/1987; 1 tilapia whole fish composite sample collected on 12/08/1999; 1 redbelly tilapia whole fish composite sample collected on 10/24/1995, and; 2 red shiner whole fish composite samples collected on 10/24/1995, and 11/06/2000 (TSMP, 2007).

Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 0.46 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995. The exceedances were found in samples collected from 5/21/1986 through 11/06/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5102
Pollutant:	Dieldrin | Endrin | Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine sediment quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at 2 locations in the Coachella Stormwater Channel. Of these total samples, none exceeded the PEC (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Consensus Based Sediment Quality Guideline Probable Effects Concentrations (PECs) for the protection of freshwater organisms to toxic effects were used for the following constituents: 61.8 ug/g Dieldrin, 207 ug/kg Endrin, and 4.99 ug/kg Lindane/Hexachlorocyclohexane (HCH) (Macdonald et al, 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Samples were collected from near Ave 52 and at the outlet to the Salton Sea.
Temporal Representation:	Nine sediment samples were collected. Sediment samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 at the outlet to the Salton Sea location in. Samples were collected from the Ave 52 location in May and October of 2002.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4994
Pollutant:	.alpha.-Endosulfan(Endosulfan 1) | .beta.-Endosulfan (Endosulfan 2) | Aldrin | Chlordane | DDT | Dieldrin | Endrin | Heptachlor | Heptachlor epoxide | Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Seven water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 1 location in the Coachella Stormwater Channel. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentrations (CMCs) for the protection of freshwater aquatic life uses were used for the following constituents: 3 ug/l Aldrin, 0.22 ug/l alpha Endosulfan, 0.22 ug/l beta-Endosulfan, 2.4 ug/l Chlordane, 1.1 ug/l DDT, 0.24 ug/l Dieldrin, 0.086 ug/l Endrin, 0.52 ug/l Heptachlor, 0.52 ug/l Heptachlor epoxide, and 1.4 ug/l Mercury (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from near the outlet to the Salton Sea.
Temporal Representation:	Seven water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID **8278**

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence: This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 4 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 3.6 ug/kg threshold for consumption, there were 4 exceedances out of 4 total fish tissue samples

taken over all the sampling years. When compared to the NAS 500 ug/kg threshold for aquatic life, there were no exceedances out of 12 fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 4 out of 4 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8278

LOE ID:	5435
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. Four fish fillet samples and 4 whole fish sample results could not be used in this assessment because the sample results were non-detect and the detection limit was above the criteria concentration. The 1 fish fillet samples and 3 whole fish samples that were acceptable were generally collected from 5/1986 through 11/2000. Of these total samples, 1 fish fillet samples and 3 whole fish samples collected at 1 location exceeded the OEHHA Fish Contaminant Goal. Exceedances were found in 1 channel catfish fillet composite sample collected on 5/21/1986, 1 tilapia whole fish composite sample collected on 12/08/1999, and 2 red shiner whole fish composite samples collected on 10/24/1995, and

	11/06/2000 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 3.6 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995. The exceedances were found in samples collected from 5/21/1986 through 11/06/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5644
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Five fish fillet samples and seven whole fish samples were taken at 1 location in the channel. The fish samples were generally collected from 5/1986 through 11/2000. Of these total samples, none exceeded the NAS tissue guideline (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 500 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the Coachella Valley Storm Water Channel near Mecca, CA.
Temporal Representation:	Fish tissue samples were generally collected from 5/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Five fish fillet samples of channel catfish, carp and tilapia were collected. One channel catfish fillet composite sample was collected in the year 1986. One channel catfish single fish fillet sample was collected in the year 1987. One carp fillet composite sample was collected in the year 1986. One carp single fish fillet sample was collected in the year 1987. One tilapia fillet composite sample was collected in the year 1997. Seven whole fish composite samples of red shiner, tilapia, sailfin molly and redbelly tilapia were collected. Three red shiner whole fish composite samples were collected in the years 1992, 1995, and 2000. Two tilapia whole fish composite samples were collected in the years 1996, and 1999. One sailfin molly whole fish composite sample was collected in the year 1995. One redbelly tilapia was collected in the year 1995.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Water Body Name:	**Imperial Valley Drains**
Water Body ID:	**CAR723100001999020515032 3**
Water Body Type:	**River & Stream**

DECISION ID	**8596**

Pollutant:	**Chlordane**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 20 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 5.6 ug/kg threshold for consumption, there were 19 exceedances out of 40 total fish tissue samples taken. When compared to the NAS 100 ug/kg threshold for aquatic lfe, there was 1 exceedance out of 40 total fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 19 out of 40 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8596

LOE ID:	5581
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Twenty-one fish fillet samples and nineteen whole fish samples were taken at 14 locations in Imperial Valley drains. The fish samples were generally collected from 10/1985 through 11/2000. Of these total samples, 1 fish fillet samples collected at 1 location exceeded the NAS tissue guideline. At Rice drain 3 an exceedence was found in 1 carp fillet composite sample collected on 10/10/1985. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 100 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the following Imperial Valley drain locations; Rose drain, Holtville Main drain, Central drain, South Central drain, Rice drain 3, Verde drain, Greeson drain, Fig drain, Pumice drain, Mayflower drain, Orange drain, Peach Drain, Tokay drain, Barbara Worth drain, and Warren drain.
Temporal Representation:	Fish tissue samples were generally collected from 10/1985 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Twenty-one fish fillet samples of carp, channel catfish, tilapia, flathead catfish, spiny soft shelled turtle, redbelly tilapia, and yellow bullhead were collected. Eight carp fillet composite samples were collected in the years (2)1985, 1986, 1988, (3)1990, and 1999. Two carp single fish fillet samples were collected in the years 1989-90. Three channel catfish fillet composite samples were collected in the years 1989-90, and 1999. One channel catfish single fish fillet sample was collected in the year 1999. Two tilapia fillet composite samples were collected in the years 1996, and 2000. One flathead catfish fillet composite sample was collected in the year 1988. Two spiny soft shelled turtle fillet composite samples were collected in the year (2)1992. One redbelly tilapia fillet

	composite sample was collected in the year 1992. One yellow bullhead fillet composite sample was collected in the year 1985. Nineteen whole fish samples of mosquitofish, and sailfin molly were collected. Twelve mosquitofish whole fish composite samples were collected in 1985, 1989, (2)1990, (3)1991, 1995-96, and (3)2000. Seven sailfin molly whole fish composite samples were collected in (2)1989, 1991, (2)1992, (2)2000. An exceedance was found in a sample collected on 10/10/1985.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	

LOE ID:	5438
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	40
Number of Exceedances:	19
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Twenty-one fish fillet samples and nineteen whole fish samples were taken at 14 locations in Imperial Valley drains. The fish tissue samples were generally collected from 10/1985 through 11/2000. Of these total samples, 9 fish fillet samples and 10 whole fish samples collected at 10 locations exceeded the OEHHA Fish Contaminant Goal. At Holtville Main drain exceedances were found in 2 channel catfish fillet composite samples collected on 10/28/1989, and 12/05/1999. At Central drain exceedances were found in 1 carp fillet composite sample collected on 12/05/1999, and 1 sailfin molly whole fish composite sample collected on 11/08/2000. At South Central drain exceedances were found in 1 channel catfish single fish fillet sample collected on 12/05/1999, and 1 carp single fish fillet collected on 8/01/1990. At Rice drain 3 an exceedance was found in 1 carp fillet composite sample collected on 10/10/1985. At Greeson exceedances were found in 1 carp fillet composite sample collected on 11/15/1985, 1 spiny soft-shelled turtle collected on 9/18/1992, and 1 mosquitofish whole fish composite sample collected on 11/07/2000. At Pumice drain an exceedance was found in 1 channel catfish fillet composite sample collected on 11/20/1990. At Mayflower drain an exceedance was found in 1 mosquitofish whole fish composite sample collected on 8/16/1991. At Peach drain exceedances were found in 2 mosquitofish whole fish composite samples collected on 10/28/1995, and 11/03/1996, and 1 sailfin molly whole fish composite sample collected on 9/17/1992. At Barbara Worth drain exceedances were found in 2 mosquitofish whole fish composite samples collected on (2)11/08/2000, and 1 sailfin molly whole fish composite sample collected on 9/17/1992. At Warren Drain an exceedance was found in 1 mosquitofish whole fish composite sample collected on 9/09/1990 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment

	samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 5.6 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the following Imperial Valley drain locations; Rose drain, Holtville Main drain, Central drain, South Central drain, Rice drain 3, Verde drain, Greeson drain, Fig drain, Pumice drain, Mayflower drain, Orange drain, Peach Drain, Tokay drain, Barbara Worth drain, and Warren drain.
Temporal Representation:	Fish tissue samples were generally collected from 10/1985 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Twenty-one fish fillet samples of carp, channel catfish, tilapia, flathead catfish, spiny soft shelled turtle, redbelly tilapia, and yellow bullhead were collected. Eight carp fillet composite samples were collected in the years (2)1985, 1986, 1988, (3)1990, and 1999. Two carp single fish fillet samples were collected in the years 1989-90. Three channel catfish fillet composite samples were collected in the years 1989-90, and 1999. One channel catfish single fish fillet sample was collected in the year 1999. Two tilapia fillet composite samples were collected in the years 1996, and 2000. One flathead catfish fillet composite sample was collected in the year 1988. Two spiny soft shelled turtle fillet composite samples were collected in the year (2)1992. One redbelly tilapia fillet composite sample was collected in the year 1992. One yellow bullhead fillet composite sample was collected in the year 1985. Nineteen whole fish samples of mosquitofish, and sailfin molly were collected. Twelve mosquitofish whole fish composite samples were collected in 1985, 1989, (2)1990, (3)1991, 1995-96, and (3)2000. Seven sailfin molly whole fish composite samples were collected in (2)1989, 1991, (2)1992, (2)2000. The exceedances were found in samples collected from 10/10/1985 through 11/08/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Water Body Name:	**New River (Imperial County)**
Water Body ID:	**CAR723100001999020510294 8**
Water Body Type:	**River & Stream**

DECISION ID 8226

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. There were 16 fish tissue samples that exceeded the water quality objective. When compared to the OEHHA 20 ug/kg threshold for consumption, there were 16 exceedances out of 43 total fish tissue samples taken over all the sampling years.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 16 out of 43 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8226

LOE ID: 5422

Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	43
Number of Exceedances:	16
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Forty-one fish fillet samples and 5 whole fish samples were taken at 2 locations in the river. Three fish fillet samples could not be used in this assessment because the constituent was not analyzed in the sample. The 38 fish fillet samples and 5 whole fish samples that were acceptable were generally collected from 6/1978 through 12/1999. Of these total samples, 14 fish fillet samples and 2 whole fish samples collected at two locations exceeded the OEHHA Screening Value. At the Westmorland location exceedances were found in; 6 channel catfish fillet composite samples collected on 5/09/1980, (2)4/22/1982, 6/13/1983, 10/10/1985, and 9/03/1987; 2 channel catfish single fish fillet samples collected on 11/18/1988, and 8/03/1990, and; 3 carp fillet composite samples collected on 4/22/1982, 5/24/1984, and 10/09/1985. At the International Boundary location exceedances were found in; 2 carp fillet composite samples collected on 7/31/1990, and 11/02/1994; 1 carp single fish fillet sample collected on 7/20/1989; 1 sailfin molly whole fish composite sample collected on 10/01/1985, and; 1 tilapia single whole fish sample collected on 5/17/1984 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 20 ug/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following New River locations: near the International Boundary, and near Westmorland, CA..
Temporal Representation:	Fish tissue samples were generally collected from 6/1978 through 12/1999. Fish tissue samples were not collected from each location every sampling round. Forty-one fish fillet samples of channel catfish, carp, flathead catfish, tilapia, spiny soft shelled turtle, and yellow bullhead were collected. Fifteen channel catfish fillet

	composite samples were collected in the years 1979, (4)1980, 1981, (2)1982, 1983, 1985, 1987, 1991, 1995 and 1997-98. Five channel catfish single fish fillet samples were collected in the years 1978, 1988, 1990, 1992-93. Ten carp fillet composite samples were collected in the years 1981-86, 1990, 1991, 1993, and 1994. Five carp single fish fillet samples were collected in the years 1978, 1989, 1994, 1997, and 1999. One flathead catfish single fish fillet sample was collected in the year 1989. One tilapia fillet composite sample was collected in the year 1996. Two spiny soft shelled turtle fillet composite samples were collected in the years 1991-92. One spiny soft shelled turtle single fish fillet sample was collected in the year 1987. One yellow bullhead single fish fillet sample was collected in the year 1989. Five whole fish samples of red swamp crayfish, tilapia and sailfin molly & mosquitofish were collected. Three red swamp crayfish whole fish composite samples were collected in the years 1978-1980. One tilapia single whole fish sample was collected in the year 1984. One sailfin molly & mosquitofish whole fish composite sample was collected in the year 1985. Exceedances were found in samples collected from 5/09/1980 through 11/02/1994.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Water Body Name:	**Palo Verde Outfall Drain and Lagoon**
Water Body ID:	**CAR7154000019990205131951**
Water Body Type:	**River & Stream**

DECISION ID	**8345**

Pollutant:	**Toxaphene**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 6 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 6.1 ug/kg threshold for consumption, there were 3 exceedances out of 3 total fish tissue samples taken. When compared to the NAS 100 ug/kg threshold for aquatic life, there were 3 exceedances out of 14 total fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 3 out of 3 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8345

LOE ID:	5649
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Fourteen fish fillet samples were taken at 1 location in the Palo Verde outfall drain. Fish samples were generally collected from 4/1986 through 11/2000. Of these total samples, 3 fish fillet samples exceeded the NAS tissue guideline. The exceedances were found in; 2 channel catfish fillet composite samples collected on 4/14/1986 and 10/25/1995 and; 1 carp fillet composite sample collected on 8/19/1991 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 100 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the Palo Verde area in the Outfall Drain.
Temporal Representation:	Fish tissue samples were generally collected and analyzed annually from 4/1986 through 11/2000. Fish tissue samples were not collected from this location every sampling round. Fourteen fish filet samples of largemouth bass, carp, Mozambique tilapia, channel catfish, and flathead catfish were collected. Four largemouth bass fillet composite samples were collected in the years 1995-96, 1998-1999. Five carp fillet composite samples were collected in the years 1986-87, 1991-1992, and 1995. One Mozambique tilapia fillet composite sample was collected in the year 1987. Two channel catfish fillet composite samples were collected in in the year 1986, and 1995. One flathead catfish single fish fillet sample was collected in the year 2000 and one flathead catfish fillet composite sample was collected in the year 1992. Exceedances were found in samples collected from 4/14/1986 through 10/25/1995.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality

QAPP Information Reference(s):	Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993). Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5464
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Fourteen fish fillet samples were taken at 1 location in the Palo Verde outfall drain. Eleven fish sample results could not be used in this assessment because the sample results were non-detect and the detection limit was above the criteria concentration. The 3 acceptabe fish fillet samples were generally collected from 4/1986 through 10/1995. Of these total samples, 3 fish fillet samples exceeded the OEHHA Fish Contaminant Goal. The exceedances were found in ;2 channel catfish fillet composite samples collected on 4/14/1986 and 10/25/1995 and; 1 carp fillet composite sample collected on 8/19/1991 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 6.1 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the Palo Verde area in the Outfall Drain.
Temporal Representation:	Fish samples were generally collected and analyzed annually from 4/1986 through 11/2000. Fish samples were not collected from this location every sampling round. Fourteen fish filet samples of largemouth bass, carp, Mozambique tilapia, channel catfish, and flathead catfish were collected. Four largemouth bass fillet composite samples were collected in the years 1995-96, 1998-1999.

	Five carp fillet composite samples were collected in the years 1986-87, 1991-1992, and 1995. One Mozambique tilapia fillet composite sample was collected in the year 1987. Two channel catfish fillet composite samples were collected in the year 1986, and 1995. One flathead catfish single fish fillet sample was collected in the year 2000 and one flathead catfish fillet composite sample was collected in the year 1992. The exceedances were found in samples collected from 4/14/1986 through 10/25/1995.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Water Body Name:	**Salton Sea**
Water Body ID:	**CAS728000001999020513350 4**
Water Body Type:	**Saline Lake**

DECISION ID	**8431**
Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. No water samples exceed the water quality objective. When compared to the U.S. Fish and Wildlife Service 250 ug/l threshold for aquatic life, there were no exceedances out of 36 total water samples taken over all the sampling years.

There were 5 fish tissue samples that exceed the water quality objective. When compared to the OEHHA 1 ug/kg threshold for consumption, there were 5 exceedances out of 9 fish tissue samples taken over all the sampling years.

No sediment samples exceed the water quality objective. When compared to the sediment quality guideline 33 mg/kg threshold, there were no exceedances out of 48 total sediment samples taken over all the sampling years

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 5 out of 9 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8431

LOE ID:	5099
Pollutant:	Arsenic | Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirty-six water quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at eight locations in the Salton Sea. Of these total samples, none exceeded the USFWS Biological Effects Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	United State Fish and Wildlife Service (USFWS) Biological Effects Criteria for the protection of aquatic life uses were used for the following constituents: 0.25 mg/l Arsenic, and 15 mg/l Copper (USDOI, 1998).
Guideline Reference:	Guidelines for Interpretation of the Biological Effect of Selected Constituents in Biota, Water, and Sediment. US Department of Interior report.
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS3, Salton Sea GS5, Salton Sea GS7, Salton Sea GS9, Salton Sea GS10.
Temporal Representation:	Thirty-six water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sa NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan

QAPP Information Reference(s):	(QAMP) (Puckett, 2002). Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5286
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Twelve sediment quality samples were taken at 10 locations in the Salton Sea, collected between 7/1998 and 10/2001. Out of these total samples, none exceeded the PEC Criteria (USGS, 2007).
Data Reference:	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Consensus Based Sediment Quality Guideline Probable Effects Concentration (PEC) Criteria 33 mg/kg for the protection of aquatic life uses (MacDonald et al, 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Samples were collected at the following Salton Sea locations: USGS Station No. 333006116031501 near the mouth of the Coachella Valley Storm Water Channel, USGS Station No. 332958116023501 in the Coachella Valley Storm Water Channel Delta, USGS Station No. 332908116011501 between North Basin and Coachella Valley Storm Water Channel, USGS Station No. 332637115512001 in Salt Creek Delta, USGS Station No. 331400115450001 near center of South Basin, USGS Station No. 331215115410001 between South Basin and New and Alamo River Deltas, USGS Station No. 330835115434501 in New River Delta, USGS Station No. 331023115473701 in San Felipe Creek Delta, USGS Station No. 330803115414001 near the mouth of New River, and USGS Station No. 331242115371401 near the mouth of Alamo River.
Temporal Representation:	Twelve samples were collected. Samples were generally collected from 7/1998 through 10/2001. Seven samples were in 1998, 1 sample was collected in 1999, no samples were collected in 2000,

	and 5 samples were collected in 2001.
Environmental Conditions:	
QAPP Information:	Assume samplers used standard USGS methods for sample collection (Wilde, variously dated). Assume analysts used standard analytical methods and quality assurance as described in (USGS, 2007).
QAPP Information Reference(s):	Data for organic and inorganic chemicals in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the National Water Information System (NWIS) Water Quality database. 1961-2005. Field measurements: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6. In United States Geological Survey (USGS). Variously dated. National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chaps. A1-A9, available online at http://pubs.water.usgs.gov/twri9A.

LOE ID:	5075
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirty-six water quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at eight locations in the Salton Sea. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentration (CMC) of 340 ug/l for the protection of freshwater aquatic life uses (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS3, Salton Sea GS5, Salton Sea GS7, Salton Sea GS9, and Salton Sea GS10.
Temporal Representation:	Thirty-six water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sa NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May

	and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5109
Pollutant:	Arsenic | Benzo[a]anthracene | Cadmium | Chromium (total) | Chrysene (C1-C4) | Copper | Dieldrin | Endrin | Fluoranthene | Fluorene | Lead | Lindane/gamma Hexachlorocyclohexane (gamma-HCH) | Mercury | Naphthalene | Nickel | PCBs (Polychlorinated biphenyls) | Phenanthrene | Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirty-six sediment quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at eight locations in the Salton Sea. Of these total samples, none exceeded the PEC (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Consensus Based Sediment Quality Guideline Probable Effects Concentrations (PECs) for the protection of freshwater organisms to toxic effects were used for the following constituents: 33 mg/kg Arsenic, 1050 ug/kg Benz[a]anthrazene, 4.98 mg/kg Cadmium, 111 mg/kg Chromium, 1290 ug/kg Chrysene, 149 mg/kg Copper, 61.8 ug/g Dieldrin, 207 ug/kg Endrin, 2230 ug/kg Fluoranthene, 536 ug/kg Fluorene, 128 mg/kg Lead, 4.99 ug/kg Lindane/Hexachlorocyclohexane (HCH), 1.06 mg/kg Mercury, 561 ug/kg Naphthalene, 48.6 mg/kg Nickel, 676 ug/kg PCBs (Polychlorinated biphenyls), 1170 ug/kg Phenanthrene , 1520 ug/kg Pyrene (Macdonald et al, 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS3, Salton Sea GS5, Salton Sea GS7, Salton Sea GS9, Salton Sea GS10.
Temporal Representation:	Thirty-six sediment samples were collected. Sediment samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sa NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5429
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty-five fish fillet samples were taken at 3 locations in the sea. Twenty-six fish fillet sample results could not be used in this assessment because the sample were not analyzed for the analyte. The 9 fish fillet samples that were acceptable were generally collected from 8/1985 through 11/2000 at two locations. Of these total samples, 5 fillet samples collected at 2 locations exceeded the OEHHA Screening Value. At the South location exceedences were found in 1 bairdiella fillet composite sample collected on 11/09/2000, and 3 tilapia fillet composite samples collected on 11/11/1998, and (2)11/09/2000. At the North location an exceedence was found in 1 tilapia fillet composite sample collected on 11/10/1998 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.

Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 1 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following Salton Sea locations: from the North end, the South end and the West Side.
Temporal Representation:	Fish tissue samples were generally collected from 6/1984 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty five fish fillet samples of bairdiella, orangemouth corvina, redbelly tilapia, tilapia, and sargo were collected.Five bairdiella fillet composite samples were collected in the years 1985, 1987, (2)1989, and 2000. Ten orangemouth corvina fillet composite samples were collected in the years 1984-87, (4)1991, 1997, and 1999. Six orangemouth corvine single fish fillet samples were collected in the year (6)1986. Two redbelly tilapia fillet composite samples were collected in year (2)1995. Nine tilapia fillet composite samples were collected in the years 1985,1987, (2)1996, 1997, (2)1998, and (2)2000. Three sargo fillet composite samples were collected in the years 1985, 1987, and 1991. The exceedences were found in samples collected from 11/10/1998 through 11/09/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID 8432

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence: This pollutant is considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 15 water samples that exceeded the water quality objectives. When compared to the California Department of Fish and Game 0.02 ug/l threshold for aquatic life, there were 15 exceedances out of 22 total water samples taken over all the sampling years.

No fish tissue samples exceeded the water quality objective. When

compared to the OEHHA 1000 ug/kg threshold for consumption, there were no exceedances out of 31 fish tissue samples taken over all the sampling year.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 15 out of 22 water samples exceeded the California Department of Fish and Game evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8432

LOE ID:	4806
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	15
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Twenty-two water quality samples were collected every few weeks from 8/28/1996 through 4/15/1997 at three locations in the Salton Sea. Of these total samples, 15 exceeded the CDFG Criteria. The exceedences were found in samples collected on 8/28/1996, 9/10/1996, 10/01/1996, 10/31/1996, 11/12/1996, and 3/05/1997 (CDPR, 2007).
Data Reference:	Data for pesticides in water samples collected from waterbodies located in the Colorado River Basin-Region 7. Mar. 1993-Jun. 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-

	Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.02 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from three sites in Salton Sea near the mouth of the Alamo River. The sites were approximately 0.14, 0.14, and 0.25 mi. offshore.
Temporal Representation:	The samples were collected every few weeks from 8/28/1996 through 4/15/1997. The exceedences were found in samples collected from 8/28/1996 through 3/05/1997.
Environmental Conditions:	The samples were collected every few weeks from August through November 1996 and from February through April 1997 to coincide with the pesticide application periods in the Imperial Valley (autumn and late winter/early spring) (Crepeau et al, 2002).
QAPP Information:	Investigators used USGS QA/QC in sample collection and analysis. Lab analysis was done by the USGS California District Organic Chemistry Laboratory in Sacramento, California (Crepeau, 2002).
QAPP Information Reference(s):	?Dissolved Pesticides in the Alamo River and the Salton Sea, California, 1996-97.? United States Geological Survey. Sacramento, CA. Open file report No. 02-232. http://water.usgs.gov/pubs/of/ofr02232/

LOE ID:	5496
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty-one fish fillet samples were taken at 3 locations in the sea. The fish samples were generally collected from 5/1980 through 11/2000. Of these total samples, none exceeded the OEHHA Screening Value. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.

Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 10000 ug/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following Salton Sea locations: from the North end, the South end, and the West Side.
Temporal Representation:	Fish tissue samples were generally collected from 5/1980 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty-one fish fillet samples of tilapia, bairdiella, orangemouth corvina, redbelly tilapia, Mozambique tilapia, and sargo were collected. Nine tilapia fillet composites samples were collected in the years 1984-85, (2)1996, 1997, (2)1998, and (2)2000. Five bairdiella fillet composite samples were collected in 1980, 1985, (2)1989, and 2000. Ten orangemouth corvina fillet composite samples were collected in the years (2)1981, 1984-87, (2)1991, 1997, and 1999. Two orangemouth corvina single fish fillet samples were collected in the year (2)1991. Two redbelly tilapia fillet composite samples were collected in the year (2)1995. One Mozambique tilapia fillet composite sample was collected in the year 1980. Two sargo fillet composite samples were collected in the years 1985, and 1991.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID **8433**

Pollutant:	**DDT**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence: This pollutant is considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One lines of evidence received a Use Rating of Insufficient Information because there was only one sample reported in each line of evidence. According to Table 3.1 of the Listing Policy, the minimum number of samples required is 2. The results of these lines of evidence will be combined with each other in the Final Use Rating.

No water samples exceed a water quality objective. When compared to the

CTR 1.1 ug/l threshold for aquatic life, there were no exceedances out of 36 total water samples taken over all the sampling years.

There were 23 fish tissue samples that exceeded water quality objectives. When compared to the OEHHA 21 ug/kg threshold for consumption, there were 23 exceedances out of 31 total fish tissue samples taken over all the sampling years. When compared to the NAS 1000 ug/kg threshold for aquatic life, there were no exceedances out of 31 fish tissue samples taken.

No sediment samples exceed a water quality objective. When compared to the sediment quality guideline 62.9 ug/kg threshold, there were no exceedance out of 1 total sediment samples taken over all the sampling years.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 23 out of 31 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8433

LOE ID:	5427
Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	31
Number of Exceedances:	23
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty-one fish fillet samples were taken at 3 locations in the sea. The fish samples were generally collected from 5/1980 through

	11/2000. Of these total samples, 23 fillet samples collected at 3 locations exceeded the OEHHA Fish Contaminant Goal. At the South location exceedances were found in; 5 bairdiella fillet composite samples collected on 5/21/1980, 8/06/1985, (2)11/01/1989, and 11/09/2000; 5 orangemouth corvina fillet composite samples collected on 5/24/1981, 8/06/1985, 10/07/1987, 5/15/1991 and 12/06/1999; 3 tilapia fillet composite samples collected on 8/07/1985, 11/20/1997, and 11/11/1998, and; 2 Mozambique tilapia fillet composite samples collected on 5/21/1980, and 8/06/1985. At the West Shore location exceedances were found in 2 orangemouth corvina fillet composite samples collected on 6/20/1984, and 5/19/1986. At the North location exceedances were found in; 3 orangemouth corvina fillet composite samples collected on 5/29/1981, 5/30/1991, and 11/18/1997; 2 orangemouth corvina single fish fillet samples collected on 5/30/1991, and 6/18/1991, and; 1 sargo fillet composite sample collected on 5/30/1991 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 21 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the following Salton Sea locations: from the North end, the South end and the West Side.
Temporal Representation:	Fish tissue samples were generally collected from 5/1980 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty-one fish fillet samples of tilapia, bairdiella, orangemouth corvina, redbelly tilapia, Mozambique tilapia, and sargo were collected. Nine tilapia fillet composites samples were collected in the years 1984-85, (2)1996, 1997, (2)1998, and (2)2000. Five bairdiella fillet composite samples were collected in 1980, 1985, (2)1989, and 2000. Ten orangemouth corvina fillet composite samples were collected in the years (2)1981, 1984-87, (2)1991, 1997, and 1999. Two orangemouth corvina single fish fillet samples were collected in the year (2)1991. Two redbelly tilapia fillet composite samples were collected in the year (2)1995. One Mozambique tilapia fillet composite sample was collected in the year 1980. Two sargo fillet composite samples were collected in the years 1985, and 1991. The exceedances were found in samples collected from 5/21/1980 through 11/09/2000.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality

QAPP Information Reference(s):	Assurance and Quality Control, as described in Rasmussen (1993). Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5083
Pollutant:	.alpha.-Endosulfan(Endosulfan 1) | .beta.-Endosulfan (Endosulfan 2) | Aldrin | Chlordane | DDT | Dieldrin | Endrin | Heptachlor | Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirty-six water quality samples were collected and analyzed biannually from 5/2002 through 5/2005 at eight locations in the Salton Sea. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criterion Maximum Concentrations (CMCs) for the protection of freshwater aquatic life uses were used for the following constituents: 3 ug/l Aldrin, 0.22 ug/l alpha Endosulfan, 0.22 ug/l beta-Endosulfan, 2.4 ug/l Chlordane, 1.1 ug/l DDT, 0.24 ug/l Dieldrin, 0.086 ug/l Endrin, 0.52 ug/l Heptachlor, and 0.52 ug/l Heptachlor epoxide (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS3, Salton Sea GS5, Salton Sea GS7, Salton Sea GS9, and Salton Sea GS10.
Temporal Representation:	Thirty-six water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sa NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's

	Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	5514
Pollutant:	DDT
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Asses Water Quality:	One sediment sample was taken at 1 location in the sea. The sediment sample was collected on 12/10/1987. This sample did not exceed the PEC Criteria (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Consensus Based Sediment Quality Guideline Probable Effect Concentration (PEC) of 62.9 ug/kg for the protection of freshwater organisms to toxic effects(Macdonald et al, 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	A sample was collected from the south end of the Salton Sea.
Temporal Representation:	One sediment samples was collected on 12/10/87 .
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5586
Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty-one fish fillet samples were taken at 3 locations in the sea. The fish samples were generally collected from 5/1980 through 11/2000. Of these total samples, none exceeded the NAS tissue guideline. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 1000 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the Salton Sea from the North end, the South end, and the West Side.
Temporal Representation:	Fish tissue samples were generally collected from 5/1980 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty-one fish fillet samples of tilapia, bairdiella, orangemouth corvina, redbelly tilapia, Mozambique tilapia, and sargo were collected. Nine tilapia fillet composites samples were collected in the years 1984-85, (2)1996, 1997, (2)1998, and (2)2000. Five bairdiella fillet composite samples were collected in the years 1980, 1985, (2)1989, and 2000. Ten orangemouth corvina fillet composite samples were collected in the years (2)1981, 1984-87, (2)1991, 1997, and 1999. Two orangemouth corvina single fish fillet samples were collected in the years (2)1991. Two redbelly tilapia fillet composite samples were collected in the years (2)1995. One Mozambique tilapia fillet composite sample was collected in the year 1980. Two sargo fillet composite samples were collected in the years 1985, and 1991.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

DECISION ID 8434

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. There were 6 water samples that exceeded the water quality objective. When compared to the California Department of Fish and Game 0.16 ug/l threshold for aquatic life, there were 6 exceedances out of 58 total water samples taken over all the sampling years.

No fish tissue samples exceeded the water quality objective. When compared to the OEHHA 300 ug/kg threshold for consumption, there were no exceedances out of 31 fish tissue samples taken over all the sampling years.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 6 out of 58 water samples exceeded the California Department of Fish and Game evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8434

LOE ID: 4807

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	6
Data and Information Type:	Other Agencies/Organizations provided monitoring data
Data Used to Asses Water Quality:	Twenty-two water samples were collected every few weeks from 8/28/1996 through 4/15/1997 at three locations in the Salton Sea. Of these total samples, 6 exceeded the CDFG Criteria. The exceedences were found in samples collected on 10/01/1996 and 10/31/1996. (CDPR, 2007).
Data Reference:	Data for pesticides in water samples collected from waterbodies located in the Colorado River Basin-Region 7. Mar. 1993-Jun. 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l (1 hr. ave.) for freshwater aquatic life use protection (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from three sites in Salton Sea near the mouth of the Alamo River. The sites were approximately 0.14, 0.14, and 0.25 mi. offshore.
Temporal Representation:	The samples were collected every few weeks from 8/28/1996 through 4/15/1997. The exceedences were found in samples collected from 10/01/1996 through 10/31/1996.
Environmental Conditions:	The samples were collected every few weeks from August through November 1996 and from February through April 1997 to coincide with the pesticide application periods in the Imperial Valley (autumn and late winter/early spring) (Crepeau et al, 2002).
QAPP Information:	Investigators used USGS QA/QC in sample collection and analysis. Lab analysis was done by the USGS California District Organic Chemistry Laboratory in Sacramento, California (Crepeau, 2002).
QAPP Information Reference(s):	?Dissolved Pesticides in the Alamo River and the Salton Sea, California, 1996-97.? United States Geological Survey. Sacramento, CA. Open file report No. 02-232. http://water.usgs.gov/pubs/of/ofr02232/

LOE ID:	5497
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Thirty-one fish fillet samples were taken at 3 locations in the sea. The fish samples were generally collected from 5/1980 through 11/2000. Of these total samples, none exceeded the OEHHA Screening Value. (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 300 ug/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from the following Salton Sea locations: from the North end, the South end, and the West Side.
Temporal Representation:	Fish tissue samples were generally collected from 5/1980 through 11/2000. Fish tissue samples were not collected from each location every sampling round. Thirty-one fish fillet samples of tilapia, bairdiella, orangemouth corvina, redbelly tilapia, Mozambique tilapia, and sargo were collected. Nine tilapia fillet composites samples were collected in the years 1984-85, (2)1996, 1997, (2)1998, and (2)2000. Five bairdiella fillet composite samples were collected in 1980, 1985, (2)1989, and 2000. Ten orangemouth corvina fillet composite samples were collected in the years (2)1981, 1984-87, (2)1991, 1997, and 1999. Two orangemouth corvina single fish fillet samples were collected in the year (2)1991. Two redbelly tilapia fillet composite samples were collected in the year (2)1995. One Mozambique tilapia fillet composite sample was collected in the year 1980. Two sargo fillet composite samples were collected in the years 1985, and 1991.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies a Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID: 4954

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Thirty-six water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 8 locations in the Salton Sea. Of these total samples, none exceeded the CDFG Hazardous Assessment Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Fish and Game (CDFG) Hazardous Assessment Criteria of 0.16 ug/l for the protection of aquatic life uses (Siepmann and Finlayson, 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS3, Salton Sea GS5, Salton Sea GS7, Salton Sea GS9, Salton Sea GS10.
Temporal Representation:	Thirty-six water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sea NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 8436

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's	New Decision

Final Listing Decision:

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There were 6 water samples that exceeded the Enterococcus water quality objectives. When compared to the Basin Plan 100 MPN/100ml Enterococcus threshold for RECI beneficial use, there were 5 exceedances out of 24 total water samples taken over all the sampling years. When compared to the Basin Plan 500 MPN/100ml Enterococcus threshold for RECII beneficial use, there was 1 exceedance out of 24 total water samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 5 out of 24 water samples exceeded the Basin Plan water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8436

LOE ID:	4854
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-four water quality samples were generally collected and analyzed biannually from 5/2002 through 4/2003 at 6 locations in the Salton Sea. Of these total samples , 5 exceeded the Basin Plan Objective. The exceedences were found in samples collected on 9/30/2002, 11/04/2003, and 11/05/2003 from four different locations, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS7, and Salton Sea GS10(SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for water contact recreation (REC I) the maximum allowable Enterococcus density is 100 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS7, Salton Sea GS9, Salton Sea GS10.
Temporal Representation:	Twenty-four water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 10/2003, and once in 10/2004 from the Salton Sea NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round. The exceedances were found in samples collected from 9/2002 through 11/2003.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4912
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Asses Water Quality:	Twenty-four water quality samples were generally collected and analyzed biannually from 5/2002 through 11/2003, at 4 locations in the Salton Sea. Of these total samples, 1 exceeded the Basin Plan Objective. The exceedence was found in a sample collected on 11/04/2003 from the middle of the Salton Sea (GS2) (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	Basin Plan:In waters designated for noncontact water recreation (REC II) the maximum allowable Enterococcus density is 500 MPN/ 100 ml (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following Salton Sea location: Salton Sea Drain NW1, Salton Sea Drain NW2, Salton Sea GS2, Salton Sea GS7, Salton Sea GS9, Salton Sea GS10.
Temporal Representation:	Twenty-four water samples were collected. Water samples were generally collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 from the Salton Sea NW2, GS2, GS7, and GS9 locations. The rest of the locations were sampled in May and October 2002. Samples were not collected from each location every sampling round.
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Water Body Name:	**Wiest Lake**
Water Body ID:	**CAL7231000020000127135508**
Water Body Type:	**Lake & Reservoir**

DECISION ID	**8580**

Pollutant:	**DDT**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two fish tissue samples exceeded the water quality objective. When compared to the OEHHA 21 ug/kg threshold, there were no exceedances out of 35 fish tissue samples taken.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 2 out of 2 fish tissue samples exceeded the Office of Environmental Health Hazard Assessment fish tissue guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 8580

LOE ID: 5588

Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Two fish fillet samples were taken at 1 location in the lake. The samples were generally collected in 10/1989 and 12/1999. Of these two samples, neither exceeded the NAS tissue guideline (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	National Academy of Science (NAS) tissue guideline of 1000 ug/kg for the protection of aquatic life uses (NAS, 1973).
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Samples were collected from the interior of Wiest Lake.
Temporal Representation:	Two largemouth bass fillet composite samples were collected in 10/1989 and 12/1999.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

LOE ID:	5551
Pollutant:	DDT
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	Fish tissue analysis
Data Used to Asses Water Quality:	Two fish fillet samples were taken at 1 location in the lake. The samples were generally collected in 10/1989 and 12/1999. Of these two samples, both exceeded the OEHHA Fish Contaminant Goal. The exceedances were found in 2 largemouth bass fillet composite samples collected on 10/31/1989, and 12/06/1999 (TSMP, 2007).
Data Reference:	Data for organic and inorganic chemicals in fish and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7, collected and reported on the Toxic Substances Monitoring Program (TSMP) database. 1978-2000. State Water Resources Control Board (SWRCB). Sacramento, CA.
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Fish Contaminant Goal of 21 ug/kg to protect human health when consuming fish (OEHHA, 2008).
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples were collected from the interior of Wiest Lake.
Temporal Representation:	Two largemouth bass fillet composite samples were collected in 10/1989 and 12/1999. Exceedances were found in samples collected on 10/31/1989, and 12/06/1999.
Environmental Conditions:	
QAPP Information:	The field procedures are described in TSMP Data Reports and associated Appendices. CDFG's Laboratory applies Quality Assurance Program Plan procedures for laboratory Quality Assurance and Quality Control, as described in Rasmussen (1993).
QAPP Information Reference(s):	Toxic Substances Monitoring Program 1991 Data Report. 93-1WQ. State Water Resources Control Board (SWRCB), Division of Water Quality. Sacramento, CA.

Delist from 303(d) list (TMDL required list)

New River (Imperial County)

- 1,2,4-Trimethylbenzene (6090)
- Chloroform (6092)
- Pesticides (6326)
- Toluene (6327)
- meta-para xylenes (6322)
- o-Xylene (6323)
- p-Cymene (6324)
- p-Dichlorobenzene (DCB) (6325)

Water Body Name: **New River (Imperial County)**
Water Body ID: **CAR723100001999020510 2948**
Water Body Type: **River & Stream**

DECISION ID **6090**

Pollutant: **1,2,4-Trimethylbenzene**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2006)
Revision Status Revised
Reason for Delisting: State determines water quality standard is being met
Impairment from Pollutant or Pollution: Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess 1,2,4-Trimethybenzene consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is instead used to indicate this was a listing made prior to 2006.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexciali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the river.

No evaluation guideline for the dissolved fraction of 1,2,4- trimethylbenzene for the protection of human, animal or aquatic life in marine waters could be found that meet the requirements of Section 6.1.3 of the Listing Policy. Because there were no appropriate evaluation guidelines, determination of exceedances is not possible. However, since March 2007 no samples have exceeded the 1,2,4-Trimethylbenzene analytical reporting limit of 0.5 ug/l.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal weastewater from Mexicali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. No evaluation guideline for the dissolved fraction of 1,2,4-trimethylbenzene for the protection of human, animal or aquatic life in marine waters that meets the requirements of the Listing Policy could be found.
5. Since March of 2007, none of 30 water samples exceeded the analytical reporting limit. This does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 6090

LOE ID:	4665
Pollutant:	1,2,4-Trimethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

LOE ID:	21380
Pollutant:	1,2,4-Trimethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the 0.5 ug/l reporting limit (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of 1,2,4-trimethylbenzene for the protection of human, animal or aquatic life in marine waters that meets the requirements of the Listing Policy.
Guideline Reference:	
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21381
Pollutant:	1,2,4-Trimethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the 0.5 ug/l reporting limit (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of

	such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of 1,2,4-trimethylbenzene for the protection of human, animal or aquatic life in marine waters that meets the requirements of the Listing Policy.
Guideline Reference:	
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

DECISION ID 6092

Pollutant:	**Chloroform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess Chloroform consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is instead used to indicate this was a listing made prior to 2006. When compared to the USEPA criteria, there were no exceedances out of 32 water samples collected from the water column.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexcial before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in

	Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexcial before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River. 4. Since March 2007, none of 32 water samples exceeded the United States Environmental Protection Agency National Recommended Ambient Water Quality criteria used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 6092

LOE ID:	4666
Pollutant:	Chloroform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

LOE ID:	21367
Pollutant:	Chloroform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the USEPA ambient water quality criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	United States Environmental Protection Agency (USEPA) National Recommended Ambient Water Quality Criteria of 5.7 ug/l for the protection of human health when consuming water and organisms (USEPA, 2002).
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21368
Pollutant:	Chloroform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the USEPA ambient water quality criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	United States Environmental Protection Agency (USEPA) National Recommended Ambient Water Quality Criteria of 5.7 ug/l for the protection of human health when consuming water and organisms (USEPA, 2002).
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21369
Pollutant:	Chloroform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Two water samples were collected from 5/2008 through 6/2008 at 1 location in the river. Of these total samples, none exceeded the USEPA ambient water quality criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be

	discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	United States Environmental Protection Agency (USEPA) National Recommended Ambient Water Quality Criteria of 5.7 ug/l for the protection of human health when consuming water and organisms (USEPA, 2002).
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Two water samples were generally collected and analyzed monthly from 5/2008 through 6/2008. One sample was collected once a month.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 2008b).
QAPP Information Reference(s):	Water Quality Monitoring of the New River at Mexicali and International Boundary. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

DECISION ID 6326

Pollutant:	**Pesticides**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list in favor of listings for specific pesticides on the section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. However, this line of evidence is a placeholder for a 303(d) listing decision made prior to 2006.

The listing is faulty. The listing has been cited as "pesticides" rather than listing for the specifc pollutants responsible for the impairment. There is no guideline for evauating "Pesticides" and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect. The New River is currently listed on the 303(d) list as impaired by six specific pesticides: Chlordane, Chlorpyrifos, DDT, Diazinon, Dieldrin, and Toxaphene. Each of these specific pesticides have lines of evidence to support their listings. As new data is collected and assessed these and other pesticides may be either listed or delisted.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

	This conclusion is based on the staff findings that: 1. A water quality guideline for "pesticides" is not available that complies with the requirements of section 6.1.3 of the Listing Policy. Water qaulity guidelines for specific pesticides are available that comply with section 6.1.3 of the Listing Policy. 2. The New River is currently listed on the 303(d) list as impaired by six specific pesticides. 3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list in favor of listings for specific pesticides.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 6326

LOE ID:	4392
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 6327

Pollutant:	**Toluene**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)

Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess Toluene consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but instead used to indicate this was a listing made prior to 2006. Another line of evidence contains data collected prior to March 2007, although none of the sample results exceed the CTR criteria this data is not representative of the current conditions in the River. When comparing data collected since March 2007, there were no exceedances of the CTR criteria out of 32 samples collected from the water column.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexciali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100%of the municipal wastewater from Mexicali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. Since March of 2007, none of 32 water samples exceeded the California Toxics Rule criteria used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 6327

LOE ID: 21375

Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21376
Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Two water samples were collected from 5/2008 through 6/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Two water samples were generally collected and analyzed monthly from 5/2008 through 6/2008. One sample was collected once a month.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 2008b).
QAPP Information Reference(s):	Water Quality Monitoring of the New River at Mexicali and International Boundary. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21374
Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).

Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	5038
Pollutant:	1,1,2-Trichloroethane | 1,2-Dichloroethane | 1,2-Dichloropropane | Bromoform | Chlorobenzene (mono) | Dichlorobromomethane | Ethylbenzene | Hexachlorobutadiene | Tetrachloroethylene/PCE | Toluene | Trichloroethylene/TCE | p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nineteen water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 4 locations along the New River. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.

Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents: 360 ug/l Bromoform, 21000 ug/l Chlorobenzene, 46 ug/l Dichlorobromomethane, 2600 ug/l p-Dichlorobenzene, 99 ug/l 1,2-Dichloroethane, 39 ug/l 1,2-Dichloropropane, 29000 ug/l Ethylbenzene, 50 ug/l Hexachlorobutadiene, 8.85 ug/l Tetrachloroethylene, 200000 ug/l Toluene, 42 ug/l 1,1,2-Trichloroethane, and 81 ug/l Trichloroethylene (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following New River locations: at the International Boundary, at the Even Hewes Highway overpass near Seeley, CA, Drop 2, and near the outlet to the Salton Sea near Calipatria, CA.
Temporal Representation:	Nineteen water samples were collected. Water samples were collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 at the international Boundary and the outlet to the Salton Sea locations. Another sample was collected from the International Boundary location in 7/2003. The rest of the locations were sampled twice in May and october of 2002
Environmental Conditions:	
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4393
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 6322

Pollutant:	**meta-para xylenes**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess copper consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is instead used to indicate this was a listing made prior to 2006. When compared to the drinking water secondary MCL, there were no exceedances out of 32 samples collected from the water column.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexcial before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexcial before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. Since March 2007, none of 32 water samples exceeded the drinking water secondary MCL used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 6322

LOE ID:	4387
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

LOE ID:	21370
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and

	Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21372
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.

Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months..
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21373
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Two water samples were collected from 5/2008 through 6/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Two water samples were generally collected and analyzed monthly

	from 5/2008 through 6/2008. One sample was collected once a month.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 2008b).
QAPP Information Reference(s):	Water Quality Monitoring of the New River at Mexicali and International Boundary. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

DECISION ID 6323

Pollutant:	**o-Xylene**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess o-xylene consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is used instead to indicate this was a listing made prior to 2006. When compared to the drinking water secondary MCL, there were no exceedances out of 32 samples collected from the water column.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexciali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100%of the municipal wastewater from Mexicali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. Sinch March of 2007, none of 32 water samples exceeded the drinking water secondary MCL used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Decision / Staff Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the

pollutant are not being exceeded.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 6323

LOE ID:	21372
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months..
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21373
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Two water samples were collected from 5/2008 through 6/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Two water samples were generally collected and analyzed monthly from 5/2008 through 6/2008. One sample was collected once a month.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 2008b).
QAPP Information Reference(s):	Water Quality Monitoring of the New River at Mexicali and International Boundary. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	4389
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

LOE ID:	21370
Pollutant:	Xylenes (total) (mixed)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the drinking water secondary MCL (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Department of Public Health (CDPH) Drinking Water Secondary Maximum Contaminant Level (SMCL) of 0.02 mg/l total xylenes for consumer acceptance (CCR, Title 22).
Guideline Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally

	collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

DECISION ID 6324

Pollutant:	**p-Cymene**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess p-Cymene consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is used instead to indicate this was a listing made prior to 2006.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexciali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

No evaluation guideline for the dissolved fraction of p-Cymene for the protection of human, animal or aquatic life in marine waters could be found that meet the requirements of section 6.1.3 of the Listing Policy. Because there were no appropriate evaluation guidelines, determination of exceedances is not possible. However, since March 2007 no samples have exceeded the p-Cymene analytical reporting limit of 0.5 ug/l.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100%of the municipal wastewater from Mexicali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. No evaluation guideline for the dissolved fraction of p-Cymene for the protection of human, animal or aquatic life in marine waters that meets the requirements of the Listing Policy could be found.
5. Since March of 2007, none of 30 water samples exceeded the analytical

	reporting limit. This does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
RWQCB Board Decision / Staff Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.
SWRCB Board Decision / Staff Recommendation:	
USEPA Decision:	

Lines of Evidence (LOEs) for Decision ID 6324

LOE ID:	21378
Pollutant:	p-Cymene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the 0.5 ug/l reporting limit (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of p-cymene for the protection of human, animal or aquatic life in fresh waters that meets the requirements of the Listing Policy.
Guideline Reference:	
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months.

Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21377
Pollutant:	p-Cymene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the 0.5 ug/l reporting limit (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of p-cymene for the protection of human, animal or aquatic life in fresh waters that meets the requirements of the Listing Policy.
Guideline Reference:	
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	4390
Pollutant:	p-Cymene

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 6325

Pollutant:	**p-Dichlorobenzene (DCB)**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2006)
Revision Status	Revised
Reason for Delisting:	State determines water quality standard is being met
Impairment from Pollutant or Pollution:	Pollutant

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess p-Dichlorobenzene consistent with Listing Policy section 4.1. One line is a placeholder line of evidence, containing no data but is used instead to indicate this was a listing made prior to 2006. Another water line of evidence contains data collected prior to March 2007. Although none of the sample results exceed the CTR criteria this data is not representative of the current conditions in the River. When comparing data collected since March of 2007, there were no exceedances of the CTR criteria out of 32 samples from the water column.

Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexciali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-

pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Since March of 2007, a Wastewater Treatment Plant (Las Arenitas) in Mexicali Mexico, has treated nearly 100% of the municipal wastewater from Mexicali before it is discharged into the New River. Monitoring data collected before March 2007 is no longer representative of water quality in the River.
4. Since March of 2007, none of 32 water samples exceeded the California Toxics Rule criteria used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Decision / Staff Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

SWRCB Board Decision / Staff Recommendation:

USEPA Decision:

Lines of Evidence (LOEs) for Decision ID 6325

LOE ID:	21375
Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Twenty-one water samples were collected from 10/2007 through 9/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.

Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Twenty-one water samples were generally collected and analyzed monthly from 10/2007 through 9/2008. Samples were not collected in 12/2007. Two samples were collected once a month except for 3/2008 and 9/2008. Only one sample was collected in those months.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21376
Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Two water samples were collected from 5/2008 through 6/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and

	regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Two water samples were generally collected and analyzed monthly from 5/2008 through 6/2008. One sample was collected once a month.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 2008b).
QAPP Information Reference(s):	Water Quality Monitoring of the New River at Mexicali and International Boundary. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	21374
Pollutant:	1, 4 -dichlorobenzene | Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nine water samples were collected from 12/2007 through 7/2008 at 1 location in the river. Of these total samples, none exceeded the CTR criteria (CRBRWQCB, 2008).
Data Reference:	Data compiled from the Regional Board New River/Mexicali Sanitation Program and New River TMDL Development and Implementation Monitoring Program in October 2008
Water Quality Objective/Criterion:	Basin Plan: The waters shall be free from substances that may be discharged into the (New) River as a result of human activity in concentrations which are toxic or harmful to human, animal or aquatic life or which may significantly impair the beneficial uses of such waters (CRBRWQCB, 2006).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan), Colorado River Basin-Region 7. Palm Desert, CA.
Evaluation Guideline:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents, 2600 ug/l 1,4 Dichlorobenzene, 200,000 ug/l Toluene (USEPA, 2000).
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Samples were collected from the New River at the International Boundary in Calexico, CA.
Temporal Representation:	Nine water samples were collected. Water samples were generally collected and analyzed monthly from 12/2007 through 7/2008. One sample was collected once a month except for 12/2007. Two

	samples were collected in 12/2007.
Environmental Conditions:	
QAPP Information:	Quality control for the sampling and analysis was conducted in accordance with an approved QAPP (CRBRWQCB, 1996).
QAPP Information Reference(s):	Workplan/Quality Assurance Project Plan for Monitoring the new River System. Palm Desert, CA: Colorado River Regional Water Quality Control Board.

LOE ID:	5038
Pollutant:	1,1,2-Trichloroethane | 1,2-Dichloroethane | 1,2-Dichloropropane | Bromoform | Chlorobenzene (mono) | Dichlorobromomethane | Ethylbenzene | Hexachlorobutadiene | Tetrachloroethylene/PCE | Toluene | Trichloroethylene/TCE | p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Asses Water Quality:	Nineteen water quality samples were generally collected and analyzed biannually from 5/2002 through 5/2005 at 4 locations along the New River. Of these total samples, none exceeded the CTR Criteria (SWAMP, 2007).
Data Reference:	Data for organic and inorganic constituents in water and sediment samples collected from waterbodies located in the Colorado River Basin-Region 7. May 2002-May 2005.
Water Quality Objective/Criterion:	California Toxics Rule (CTR) Criteria for the protection of human health when consuming organisms from aquatic systems were used for the following constituents: 360 ug/l Bromoform, 21000 ug/l Chlorobenzene, 46 ug/l Dichlorobromomethane, 2600 ug/l p-Dichlorobenzene, 99 ug/l 1,2-Dichloroethane, 39 ug/l 1,2-Dichloropropane, 29000 ug/l Ethylbenzene, 50 ug/l Hexachlorobutadiene, 8.85 ug/l Tetrachloroethylene, 200000 ug/l Toluene, 42 ug/l 1,1,2-Trichloroethane, and 81 ug/l Trichloroethylene (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following New River locations: at the International Boundary, at the Even Hewes Highway overpass near Seeley, CA, Drop 2, and near the outlet to the Salton Sea near Calipatria, CA.
Temporal Representation:	Nineteen water samples were collected. Water samples were collected and analyzed biannually, in May and October, from 5/2002 through 5/2005 at the international Boundary and the outlet to the Salton Sea locations. Another sample was collected from the

Environmental Conditions:	International Boundary location in 7/2003. The rest of the locations were sampled twice in May and october of 2002
QAPP Information:	The sampling and analysis portions of this study were conducted in accordance with the SWAMP Quality Assurance Management Plan (QAMP) (Puckett, 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

LOE ID:	4391
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Asses Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	